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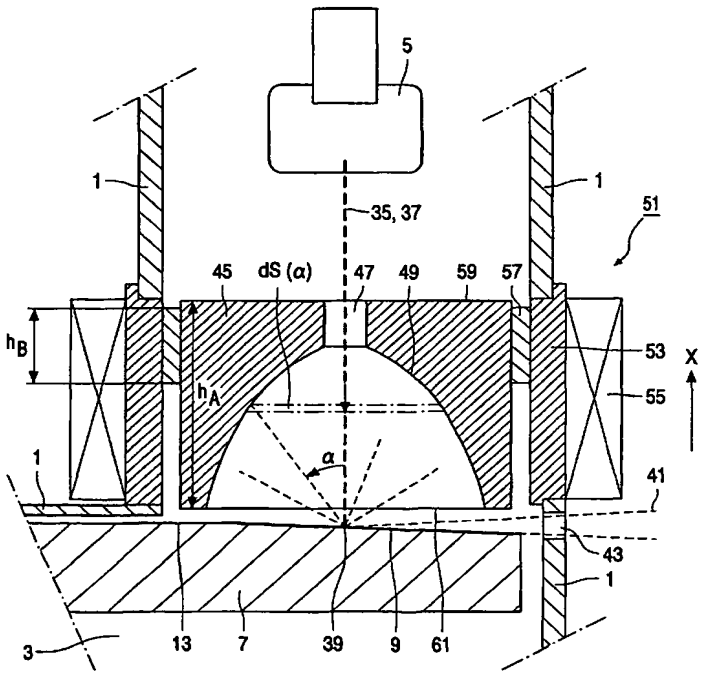
(54) Title: A DEVICE FOR GENERATING X-RAYS HAVING A HEAT ABSORBING MEMBER



(57) Abstract: The invention relates to a device for generating X-rays (41). The device comprises a source (5) for generating an electron beam (35), and a carrier (7) which is rotatable about an axis of rotation (15) and which is provided with a material (9) which generates the X-rays as a result of the incidence of the electron beam thereon. The device further comprises a heat absorbing member (45) which is arranged between the source and the carrier to catch electrons, which are scattered back from an impingement position (39) of the electron beam on the carrier, and to absorb a portion of the radiant heat generated by the carrier when heated during operation. The heat absorbing member is in thermal connection with a cooling system (51) of the device. According to the invention, the thermal connection between the heat absorbing member (45) and the cooling system (51) comprises a thermal barrier (57) which limits a rate of heat transfer (() occurring via the thermal connection per unit of temperature difference between the heat absorbing member and the cooling system. In a particular embodiment, said thermal barrier comprises an annular mounting member (57) having a limited dimension (hB), by means of which the heat absorbing member is mounted in the device. As a result of said thermal barrier, the heat absorbed by the heat absorbing member is gradually transferred to the cooling system, so that thermal peak loads on the cooling system and problems like boiling of the cooling liquid are avoided. In addition, relatively high temperatures of the heat absorbing member are allowed, so that the mass and volume of the heat absorbing member, which are necessary to provide the heat absorbing member with a sufficiently large heat absorbing capacity, are considerably reduced.

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